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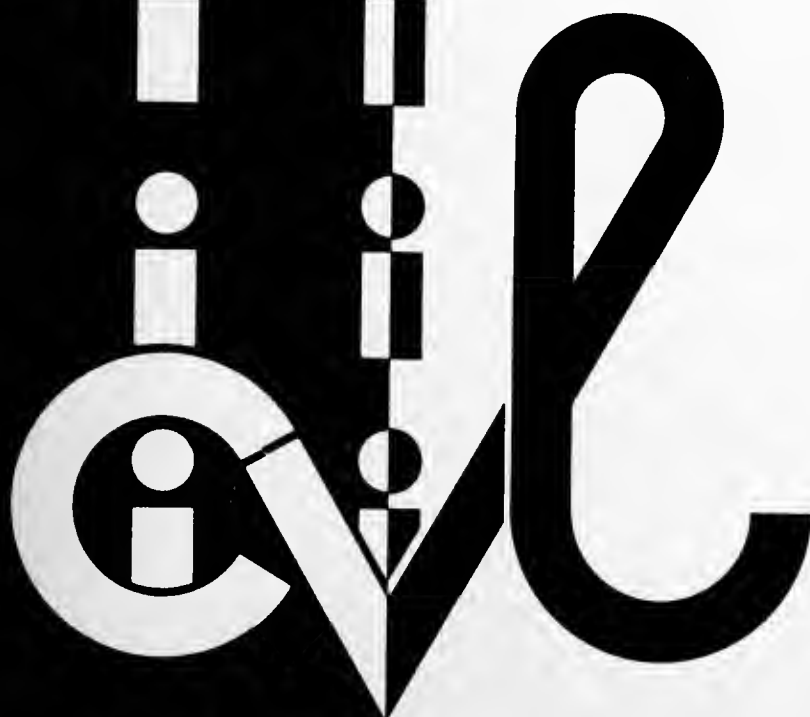
SCHOOL OF  
CIVIL ENGINEERING  
INDIANA  
DEPARTMENT OF HIGHWAYS

JOINT HIGHWAY RESEARCH PROJECT

JHRP 86/19

TRAFFIC SPEED REPORT NO. 120

David L. Cochran  
Leroy Gray



PURDUE UNIVERSITY



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JOINT HIGHWAY RESEARCH PROJECT

JHRP 86/19

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TRAFFIC SPEED REPORT NO. 120

To: Harold L. Michael, Director  
Joint Highway Research Project

December 10, 1986

File: 8 - 3 - 3

From: David L. Cochran, Engr. Tech.  
Joint Highway Research Project

Project: C - 36 - 10C

The attached Progress Report No. 120 is the report of the May-August 1986 study of free flow automobile and truck speeds on tangent, level and dry sections of rural interstate, rural 4-lane, rural 2-lane and urban interstate highways in Indiana. This report was prepared by David L. Cochran. Data were collected by David Cochran with the assistance of Leroy Gray.

The results of this report show that all types of vehicles, on all types of Indiana highways, had an average free flow speed of 58.6 mph in 1986. This indicates an increase of 1.4 mph from 1985. If the two urban interstates are excluded, the average speed on all types of rural highways in Indiana becomes 58.4 mph in 1986. This represents an increase of 1.5 mph from 1985.

This report includes a chart, Figure 2 on page 8, that graphically summarizes the results of summer free flow speed monitoring on rural highways since 1977. Table 8, on page 9, summarizes the changes in speed in 1986 from 1985. Table 9, on page 10, summarizes the changes in percent of vehicles exceeding 55, 60 and 65 mph in 1986 from 1985.

Copies of this report will be sent to the Indiana DOH. Copies of this report are requested for release to the Indiana State Police and other highway safety agencies, which is normal procedure for these reports.

Respectfully submitted,



David L. Cochran  
Traffic Research

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TRAFFIC SPEED REPORT NO. 120

by

David L. Cochran, Engr. Tech.  
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Joint Highway Research Project  
Project No.: C - 36 - 10C  
File No.: 8 - 3 - 3

Prepared as Part of an Investigation  
Conducted by

Joint Highway Research Project  
Engineering Experiment Station,  
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in Cooperation with the  
Indiana Department of Highways

Purdue University  
West Lafayette, Indiana 47907

December 10, 1986





## TRAFFIC SPEED REPORT NO. 120

This report is an analysis of spot speed observations made during the 1986 summer months of May, June, July and August. All observations were made of free-flowing vehicles on level, tangent sections of rural and urban highways under favorable conditions. All observations were made during daylight hours.

This is the sixth report with exclusively summer observations since 1975. From 1976 until 1980 (Traffic Speed Reports #95 through #114), 14 primary and secondary stations, as well as another 14 randomly selected stations, were monitored every quarter in conjunction with the 55 mph speed compliance certification program performed for the Federal Highway Administration. Since 1981 the State and Federal studies have been conducted separately.

Fourteen speed monitoring stations were used for the 1986 Traffic Speed Report calculations. These stations are divided into four categories which include: four rural interstate locations, four rural four-lane locations, four rural two-lane locations and two urban interstate locations. These 14 stations are the same as the primary and secondary control stations monitored since 1975 in Indiana. Prior to 1975, only the 12 rural stations were monitored. The locations of the 12 rural stations are essentially the same since 1970 except for stations 4L-32 (formerly number 6 on US 52) and 2L-54 (formerly number 11 on US 31), which changed in 1975.

The speed limit at all the stations is 55 mph. The site locations are given in Table 1 and shown in Figure 1.

The vehicles were classified as Indiana or Non-Indiana passenger cars and light trucks (less than 5000 lbs. gross weight) or heavy trucks (equal to or more than 5000 lbs. gross weight). Computer analysis was performed for each vehicle classification, and for combined passenger cars and combined trucks.

### 1. Sample Size

At each station, a minimum of 200 vehicles in each direction were recorded using the free flow technique at that location. At least 25 of these vehicles, in each direction, were required to be heavy trucks.

### 2. Equipment and Field Procedure

The observations for this study were obtained by use of a Kustom Signals Model HR-8 K-Band radar gun. The burst method, using the on/off switch, was used to record speeds. This method was used to avoid early detection by radar detectors. Speeds were taken from within a van parked on the right shoulder of the road or parked in an access driveway to the road. The observers were



Table 1: Monitoring Locations

Rural Interstate Highways

RI-06	I-65	7.5 miles North of SR 160, mile marker 22
RI-12	I-74	East of I-465 at mile marker 108.8
RI-21	I-69	1.6 miles South of SR 18, mile marker 62
RI-34	I-65	2.0 miles South of SR 39, mile marker 135

4-Lane Highways

4L-17	US 52	2.0 miles East of US 231
4L-20	US 41	1.0 mile North of SR 2
4L-21	US 31	0.8 mile North of SR 38
4L-32	US 30	3.7 miles West of US 421

2-Lane Highways

2L-18	US 35	1.9 miles East of I-69
2L-54	US 231	1.1 miles South of SR 234
2L-79	SR 25	0.7 mile South of Americus
2L-91	SR 43	2.0 miles South of Chalmers

Urban Interstate Highways

UI-01	I-94	First bridge East of Burr Street interchange
UI-06	I-65	Just South of White River, mile marker 116.8

equipped with a CB radio to monitor possible radio notification of speed measurement and of police vehicles in the area. When radar speed recording was detected, and subsequently broadcast on the CB radio, speeds were not taken for at least 5 minutes. This problem occurred primarily on interstate highways.

The accuracy of the radar gun was checked at the beginning and end of each data recording session. The calibration was also confirmed every time the sampling technique was changed, and at other times when deemed necessary.

### 3. Results of Analysis

The free flow data collected were analyzed and are summarized for each station in Tables A1 through A14 in the Appendix. Tables A15 through A18 summarize the free flow data by highway classification. Table A19 is the summary for all 14 stations. Table A20 is the summary for all 12 rural highway classifications.

The results of the free flow data, categorized by highway classification and vehicle type, are shown in Table 2 through Table 5.



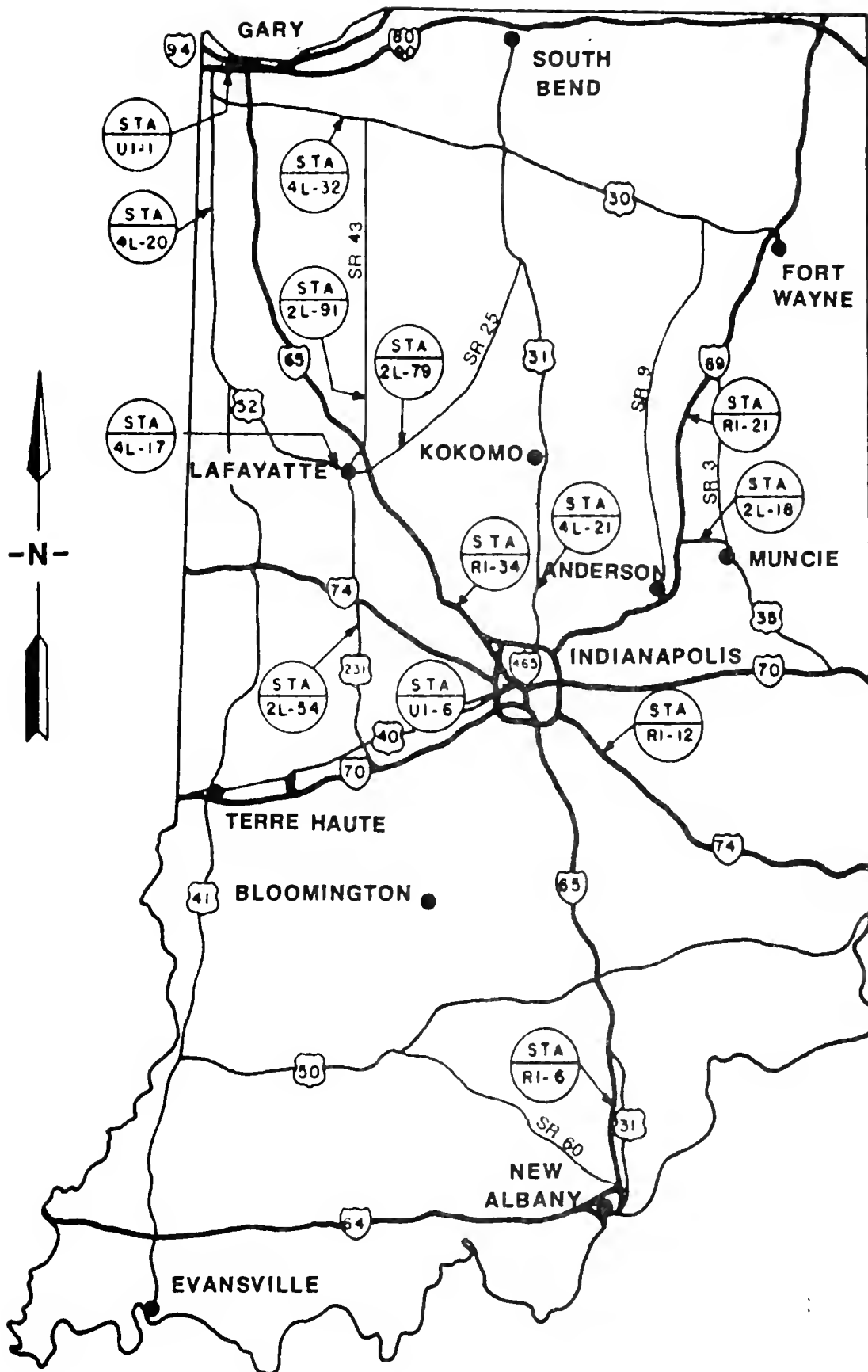


FIGURE 1. LOCATION OF SPEED-STUDY STATIONS



Table 2: Average Speed (MPH)

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	60.1	60.3	58.7	57.1	58.8	58.6
Non-Indiana	60.3	60.9	59.7	58.2	60.2	60.2
All Passenger Cars	60.2	60.5	59.0	57.2	59.2	59.0
85 Percentile (All)	64.3	64.0	63.0	61.5	63.4	63.2
15 Percentile (All)	55.2	55.8	53.8	52.0	54.0	53.8
Trucks:						
Less than 5000 lbs.	59.7	59.9	57.0	56.5	58.0	57.7
5000 lbs. or more	58.1	58.7	56.9	55.6	57.3	57.2
All Trucks	59.0	59.3	57.0	56.2	57.8	57.5
85 Percentile (All)	62.8	62.9	61.3	60.4	62.0	61.8
15 Percentile (All)	54.1	54.7	51.4	50.5	52.4	52.1
All Vehicles:						
Average	59.7	60.1	58.2	56.8	58.6	58.4
85 Percentile	63.8	63.8	62.5	51.4	62.9	62.7
15 Percentile	54.7	55.4	52.9	61.1	53.4	53.2

Table 3: Percent of Vehicles Exceeding 55 MPH

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	85.3	89.4	76.9	62.5	76.8	75.3
Non-Indiana	88.0	90.8	80.7	67.7	85.2	84.7
All Passenger Cars	86.1	90.0	77.7	63.1	78.9	77.6
Trucks:						
Less than 5000 lbs.	83.8	84.5	61.7	60.8	70.8	68.5
5000 lbs or more	76.1	81.6	65.5	50.8	68.8	67.2
All Trucks	80.2	83.2	63.2	57.1	70.0	68.0
All Vehicles:	83.8	87.5	72.3	60.8	75.5	74.0





Table 4: Percent of Vehicles Exceeding 60 MPH

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	44.9	46.2	32.0	22.2	34.4	32.5
Non-Indiana	47.4	54.2	43.5	27.7	47.4	47.4
All Passenger Cars	45.6	49.2	34.6	22.8	37.6	36.2
Trucks:						
Less than 5000 lbs.	43.8	40.0	22.5	16.3	28.5	25.9
5000 lbs. or more	23.5	28.9	20.7	17.5	22.9	22.8
All Trucks	34.4	35.0	21.8	16.8	26.2	24.6
All Vehicles:	41.2	44.1	29.8	20.5	33.3	31.9

Table 5: Percent of Vehicles Exceeding 65 MPH

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	11.2	9.0	7.4	4.7	7.5	6.8
Non-Indiana	8.1	11.0	10.6	7.7	10.0	10.4
All Passenger Cars	10.3	9.7	8.1	5.0	8.1	7.7
Trucks:						
Less than 5000 lbs.	9.2	10.1	5.1	4.6	6.9	6.5
5000 lbs. or more	2.7	5.1	3.1	2.7	3.5	3.7
All Trucks	6.2	7.9	4.4	3.9	5.5	5.4
All Vehicles:	8.7	9.0	6.7	4.5	7.1	6.8

The results of this study, and similar studies conducted since 1977, are tabulated in Table 6. The speed values for 1977 and 1978 were calculated from the tables given in the respective appendices of the reports (nos. 102 and 106) for the 14 locations used in this study. The 15th and 85th percentile speed values for 1979 through 1986 were calculated by interpolation over 1 mph speed intervals from the raw data.



Table 6: Summary of Spot Speed Observations on Indiana Highways  
(Free-Moving Vehicles on Level, Tangent Sections)

	----Passenger Cars----				-----Trucks-----				-Combined-	
	Ind. Mean	Non- Ind. Mean	All Mean	All 85%	Lgt. Mean	Hvy. Mean	All Mean	All 85%	All Mean	All 85%
2-Lane :										
1977	56.7	56.2	56.7	62.3	56.3	54.7	54.6	60.4	55.4	60.9
1978	56.8	57.1	56.8	61.9	55.4	55.9	55.2	61.1	55.7	61.3
1979	56.4	56.0	56.4	60.5	55.1	55.6	55.6	61.1	55.4	61.4
1980	55.2	58.4	55.3	59.7	55.1	54.9	54.9	60.2	55.0	60.2
1981	55.7	56.2	55.8	60.2	55.0	54.7	54.8	59.9	54.8	59.9
1982	55.8	57.2	56.0	60.2	54.8	54.9	54.9	59.7	54.9	60.0
1983	56.3	55.8	56.2	60.7	55.0	54.6	54.8	59.3	55.7	60.2
1984	56.5	56.9	56.6	60.9	55.2	55.1	55.2	59.8	56.0	60.4
1985	55.8	55.5	55.7	60.5	55.4	53.9	54.8	55.4	55.4	60.1
1986	57.1	58.2	57.2	61.5	56.5	55.6	56.2	60.4	56.8	61.1
4-Lane :										
1977	57.7	58.7	57.9	62.9	56.0	57.3	56.2	61.9	56.9	62.1
1978	57.5	57.8	57.5	62.5	56.0	57.7	56.9	61.5	56.9	62.1
1979	56.3	57.0	56.5	61.1	55.7	56.4	56.5	62.3	56.1	61.6
1980	55.9	57.4	56.2	60.5	55.3	56.4	55.9	61.4	55.9	60.5
1981	56.5	58.0	56.8	61.1	56.3	56.1	56.2	61.5	56.2	61.0
1982	56.6	57.6	56.8	61.1	55.1	55.7	55.4	61.1	55.4	61.8
1983	57.4	58.0	57.5	61.7	56.4	56.4	56.4	61.7	57.1	61.4
1984	57.7	58.6	57.9	61.9	57.0	56.8	56.9	61.4	57.5	61.7
1985	56.9	58.3	57.2	61.3	56.3	55.4	55.8	60.6	56.7	61.0
1986	58.7	59.7	59.0	63.0	57.0	56.9	57.0	61.3	58.2	62.5
Rural Interstate :										
1977	60.4	60.5	60.4	65.4	58.4	59.7	57.3	63.9	59.3	64.2
1978	59.2	60.3	59.7	63.7	58.9	59.8	59.8	64.8	59.5	64.6
1979	58.4	58.9	58.6	62.4	57.6	59.3	59.5	64.5	58.7	64.0
1980	58.4	59.7	58.8	62.3	57.6	57.2	59.8	62.6	58.3	62.5
1981	57.9	59.6	58.6	62.3	57.4	58.8	58.4	62.9	58.4	62.4
1982	58.9	59.5	58.9	62.2	58.0	58.2	58.1	62.7	58.1	62.1
1983	59.2	60.0	59.5	63.1	58.5	58.7	58.6	62.8	59.2	62.8
1984	59.3	60.5	59.8	63.6	58.4	58.1	58.2	61.8	59.1	62.9
1985	59.2	60.1	59.5	63.6	58.0	57.6	57.7	61.7	58.9	62.9
1986	60.3	60.9	60.5	64.0	59.9	58.7	59.3	62.9	60.1	63.8
Urban Interstate :										
1981	57.7	58.5	57.9	62.2	57.2	56.5	56.8	61.7	57.5	61.5
1982	57.7	57.8	57.7	61.9	56.8	55.7	56.1	61.2	57.0	62.1
1983	58.7	58.2	58.6	61.9	57.8	57.2	57.4	61.4	58.2	61.6
1984	58.8	58.4	58.7	62.8	58.1	56.4	57.0	60.7	58.0	62.1
1985	59.5	59.3	59.4	63.7	58.4	57.3	57.7	60.9	58.7	62.8
1986	60.1	60.3	60.2	64.3	59.7	58.1	59.0	62.8	59.7	63.8



Figure 2 represents a graphic interpretation of the results from this, and similar studies, since 1977. The speed values plotted in Figure 2 were obtained in the same way as those in Table 6. Only data collected at the 12 rural stations were used to calculate the values in Figure 2.

Table 7 shows the average speeds for all passenger cars, trucks of more than 5000 lbs. and trucks less than 5000 lbs. with and without the two urban interstate stations. The urban interstates were first monitored in 1975.

Table 7: Average Speed (MPH)

Year	Passenger Cars		Trucks Less Than 5000 lbs.		Trucks 5000 lbs. or More	
	12 Rural Stations	All 14 Stations	12 Rural Stations	All 14 Stations	12 Rural Stations	All 14 Stations
1977	58.2	58.2	57.7	57.8	57.0	57.1
1978	58.2	58.2	57.9	57.8	56.6	56.6
1979	57.1	61.8	57.2	57.0	56.0	56.1
1980	56.7	56.8	56.8	56.6	56.0	56.1
1981	57.0	57.1	56.7	56.3	56.1	56.6
1982	57.2	57.3	55.8	55.9	56.4	56.3
1983	57.8	57.9	56.5	56.6	56.7	56.8
1984	58.1	58.3	56.7	56.9	56.9	56.8
1985	57.4	57.7	56.4	56.7	55.9	56.2
1986	59.0	59.2	57.7	58.0	57.2	57.3

#### 4. SUMMARY

Since the mean speeds are almost the same for the 12 rural stations (Table 7) as for the 14 urban and rural stations, there is no reason to expect that the results in Figure 2 would change significantly if the urban interstate stations were included in the analysis. However, for consistency in the analysis and historical reporting, the urban interstate locations are reported only in the various tables.

The 85th percentile, mean, and 15th percentile speed changes on all rural Indiana highways are also illustrated in Figure 2. The average speed of cars, light trucks and heavy trucks have remained virtually the same since 1979. Mean and 85th percentile speeds dropped sharply from the summer of 1973 to to the summer of 1974 due to the implementation of the 55 mph speed limit.

The speeds varied slightly, up and down, from 1975 through 1978; however, some stabilization was realized from 1979 through 1982 (Figure 2). Speeds appeared to increase slightly in 1983 and 1984 above previous levels. A decrease in speeds was observed in 1985 for all categories, except for the 85th percentile speed for passenger cars on rural interstates, where no change occurred. However, all categories appeared to increase sharply in 1986.



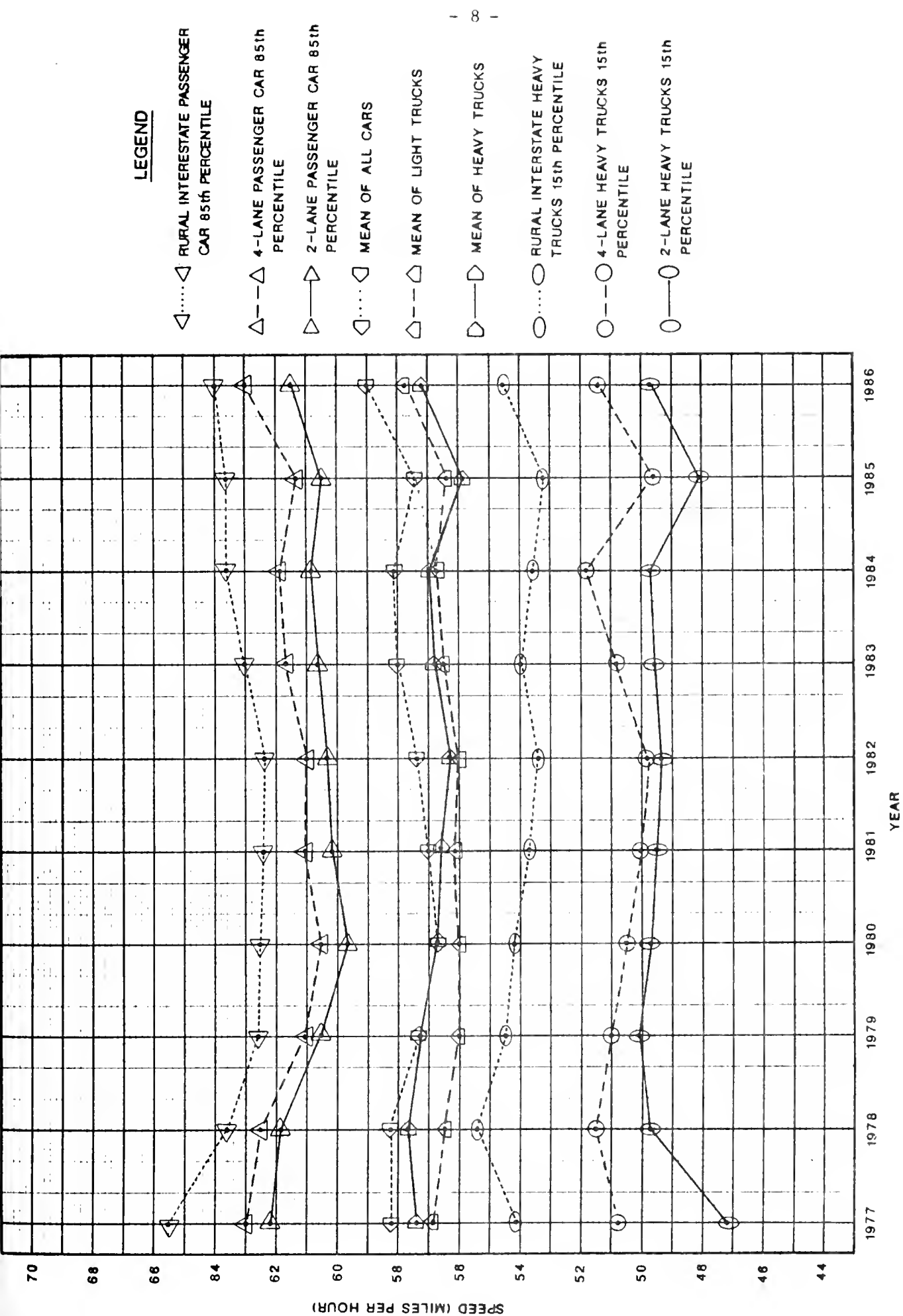


FIG. 2: INDIANA RURAL SPEED TRENDS





The 85th percentile speed for passenger cars on 4-lane highways increased by 1.7 mph (Figure 2) in 1986 from 1985, while 2-lane speed increased by 1.0 mph from 1985. An increase of 0.4 mph in 85th percentile speed was observed in 1986 from 1985 on rural interstates.

The mean speed of all three vehicle categories, on all types of rural Indiana highways, increased in 1986 from 1985 (Figure 2). Passenger cars registered the largest increase at 1.6 mph, while heavy trucks and light trucks increased by 1.3 mph each.

The 15th percentile speed for heavy trucks increased sharply in 1986 from 1985 levels (Figure 2) in all highway categories. The largest increase of 1.8 mph was observed on 4-lane highways, and a 1.6 mph increase occurred on 2-lane highways. The rural interstates increased by 1.3 mph.

A tabulation of speed changes in 1986 from 1985 is listed in Table 8. The urban interstate highways showed speed increases (Table 8) in all three vehicle categories in 1986 from 1985. Light trucks registered the largest increase at 1.3 mph, while passenger cars and heavy trucks increased by 0.8 mph each.

Table 8: Summary of Changes in Speed (MPH)  
in 1986 from 1985

Speed Category:	All Cars	L Trucks	H Trucks	All Veh.
Mean (Rural Interstate)	+ 1.0	+ 1.9	+ 1.1	+ 1.2
Mean (4-Lane)	+ 1.8	+ 0.7	+ 1.5	+ 1.5
Mean (2-Lane)	+ 1.5	+ 1.1	+ 1.7	+ 1.4
Mean (All Rural)	+ 1.6	+ 1.3	+ 1.3	+ 1.5
15th % (All Rural)	+ 1.7	+ 1.4	+ 1.5	+ 1.7
Median (All Rural)	+ 1.5	+ 1.4	+ 1.4	+ 1.5
85th % (All Rural)	+ 1.2	+ 1.5	+ 0.8	+ 1.1
Mean (Urban Interstate)	+ 0.8	+ 1.3	+ 0.8	+ 1.0
Mean (All-14)	+ 1.5	+ 1.3	+ 1.1	+ 1.4
15th % (All-14)	+ 1.7	+ 1.5	+ 1.2	+ 1.5
Median (All-14)	+ 1.5	+ 1.6	+ 1.2	+ 1.3
85th % (All-14)	+ 1.1	+ 1.6	+ 0.9	+ 1.1

All three vehicle categories: passenger cars, light trucks (less than 5000 lbs.) and heavy trucks (greater than 5000 lbs.), showed increases in speed (Table 8) on Indiana rural interstates, rural 4-lane highways and rural 2-lane highways.

The average speed of passenger cars on all types of rural Indiana highways increased (Table 8) by 1.6 mph in 1986 from 1985. The average speed of cars increased by 1.8 mph on 4-lane highways, 1.5 mph on 2-lane highways; while an increase of 1.0 mph was observed on rural interstates. The 85th percentile of passenger cars on all types of rural Indiana highways also increased by 1.2 mph from 1985.



The average speed of light trucks (less than 5000 lbs.) on all types of rural Indiana highways increased (Table 8) by 1.3 mph in 1986 from 1985. The largest increase in speed of 1.9 mph was observed on rural interstates; while 4-lane highways increased by 0.7 mph. The average speed on 2-lane highways increased by 1.1 mph. The 85th percentile of light trucks on all types of rural Indiana highways increased by 1.5 mph from 1985.

The average speed of heavy trucks (5000 lbs. or more) on all types of rural Indiana highways increased (Table 8) by 1.3 mph in 1986 from 1985. The largest increase in speed of 1.7 mph was noticed on 2-lane highways, followed closely by an increase of 1.5 mph on 4-lane highways. An increase in average speed of 1.1 mph was observed on rural interstates. The 85th percentile of heavy trucks on all types of rural Indiana highways increased by 0.8 mph from 1985.

Table 9: Summary of Changes in Percent Greater Than Speed  
in 1986 from 1985

		% > 55	% > 60	% > 65
Rural Interstate	All Cars	+ 7.8	+ 9.9	- 0.3
	Light Trucks	+14.0	+13.2	+ 4.1
	Heavy Trucks	+15.3	+ 7.0	+ 2.1
	All Vehicles	+10.6	+10.6	+ 1.2
Rural 4-Lane	All Cars	+11.4	+11.1	+ 4.4
	Light Trucks	+ 7.3	+ 4.5	+ 0.3
	Heavy Trucks	+12.0	+ 2.2	+ 0.4
	All Vehicles	+10.8	+ 8.4	+ 3.0
Rural 2-Lane	All Cars	+12.8	+ 5.8	+ 0.8
	Light Trucks	+12.1	+ 3.2	+ 1.9
	Heavy Trucks	+14.0	+ 7.9	+ 1.2
	All Vehicles	+12.7	+ 5.3	+ 1.0
Urban Interstate	All Cars	+ 4.0	+ 8.4	+ 0.7
	Light Trucks	+ 9.5	+15.9	+ 3.7
	Heavy Trucks	+ 5.3	+ 6.4	+ 0.1
	All Vehicles	+ 5.8	+10.7	+ 1.5
All Rural	All Cars	+12.0	+10.0	+ 1.8
	Light Trucks	+12.2	+ 7.5	+ 2.2
	Heavy Trucks	+12.8	+ 5.2	+ 1.2
	All Vehicles	+12.1	+ 8.7	+ 1.8
All Stations	All Cars	+10.7	+ 9.7	+ 1.6
	Light Trucks	+12.1	+ 8.8	+ 2.5
	Heavy Trucks	+10.9	+ 5.4	+ 0.9
	All Vehicles	+11.0	+ 8.9	+ 1.8



The mean speed for all vehicles on all types of rural Indiana highways increased (Table 8) in 1986 from 1985 by 1.5 mph. If the urban interstate locations are included in the analysis, the mean speed for all types of vehicles on all types of Indiana highways increased by 1.4 mph in 1986 from 1985.

The 85th percentile speed for all vehicles on all types of rural Indiana highways increased (Table 8) in 1986 from 1985 by 1.1 mph. If the urban interstate locations are included in the analysis, the 85th percentile speed for all types of vehicles on all types of Indiana highways also increased by 1.1 mph in 1986 from 1985.

A summary of changes in percent of vehicles exceeding 55, 60 and 65 mph in 1986 from 1985 is tabulated in Table 9. The highest increase in percent of passenger cars exceeding 55 mph was observed on rural 2-lane highways (Table 9). The largest increase in percent of passenger cars exceeding 60 and 65 mph was noticed on rural 4-lane highways. The smallest increase in percent of passenger cars exceeding 55 and 65 mph occurred on rural interstates; while the lowest percent exceeding 60 mph was observed on rural 2-lane highways.

The largest increase in percent of light trucks exceeding 55, 60 and 65 mph occurred on rural interstates (Table 9). The smallest increase in percent exceeding 55 and 65 mph was noticed on rural 4-lane highways; while the smallest increase in percent exceeding 60 mph was observed on rural 2-lane highways.

The largest increase in percent of heavy trucks exceeding 55 and 65 mph was noticed on rural interstates (Table 9); while the greatest increase in percent exceeding 60 mph occurred on rural 2-lane highways. The smallest increase in percent of heavy trucks exceeding 55, 60 and 65 mph was observed on rural 4-lane highways.

Table 9 indicates that all vehicles on all types of rural Indiana highways are exceeding 55 mph by an additional 12.1 percent in 1986 from 1985. An increase of 8.7 percent of all vehicles are exceeding 60 mph and an increase of 1.8 percent is exceeding 65 mph.

Table 9 also indicates that all types of vehicles on all types of Indiana highways are exceeding 55 mph by an additional 11.0 percent in 1986 from 1985. An increase of 8.9 percent of all vehicles are exceeding 60 mph; while an increase of 1.8 percent is exceeding 65 mph.

Generally speaking, it appears that the speeds, of all types of vehicles on all types of Indiana highways, have returned to the levels observed during the periods from pre-1977 to 1979.



## APPENDIX A

Speed Data (Tables A1 to A20)





TABLE A1:SPEED DATA

STATION: UI-01      HIGHWAY: I-94      LOCATION: EAST OF I-65 AT MILE MARKER 14 (TEMPORARY)

NO. OF LANES: 6      TYPE OF SURFACE: ASPHALT      WEATHER: OVERCAST

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 8/14/86

DATE: 8/13/85

TIME: 3:31 PM

TIME: 12:43 PM

PASSENGER CARS										TRUCKS					
ALL			INDIANA			NON-INDIANA			ALL	<5000 LBS.			>5000 LBS.		
OBSERVATION	LAST	PRES- ENT	LAST	PRES- ENT	LAST	ENT	PRES- ENT	LAST		LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT
NUMBER OF VEHICLES	303	320	132	169	171	151	323	276	75	141	248	135			
AVE. SPEED (MPH)	57.53	59.50	56.64	59.00	58.21	60.07	57.08	58.29	57.51	58.90	56.95	57.64			
STANDARD DEVIATION	3.673	4.111	3.674	4.096	3.533	4.067	3.893	4.186	3.379	4.820	4.033	3.297			
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
44 MPH	0.	0.	0.	0.	0.	0.	0.3	0.	0.	0.	0.4	0.			
49 MPH	4.0	0.9	6.1	1.8	2.3	0.	3.4	2.5	1.3	3.5	4.0	1.5			
54 MPH	16.8	11.3	24.2	13.6	11.1	8.6	21.4	15.6	17.3	16.3	22.6	14.8			
59 MPH	69.6	49.1	76.5	53.8	64.3	43.7	75.2	64.5	73.3	53.9	75.8	75.6			
64 MPH	97.7	90.0	100.0	91.7	95.9	88.1	97.2	93.8	98.7	89.4	96.8	98.5			
69 MPH	100.0	99.1	100.0	99.4	100.0	98.7	100.0	98.6	100.0	97.2	100.0	100.0			
74 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

DIRECTION: EB

# OF VEHICLES	171	143	66	87	105	56	180	126	50	64	130	62
AVERAGE SPEED	57.51	60.00	56.76	59.30	57.98	61.09	57.07	58.98	57.24	59.53	57.01	58.42

DIRECTION: WB

# OF VEHICLES	132	177	66	82	66	95	143	150	25	77	118	73
AVERAGE SPEED	57.55	59.10	56.53	58.68	58.58	59.46	57.09	57.70	58.04	58.38	56.89	56.99



TABLE A2:SPEED DATA

STATION: UI-06      HIGHWAY: I-65      LOCATION: SOUTH OF WHITE RIVER AT MILE MARKER 116.8

NO. OF LANES: 6      TYPE OF SURFACE: CONCRETE      WEATHER: CLEAR-SUNNY

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 7/29/86

DATE: 8/20/85

TIME: 12:28 PM

TIME: 1:23 PM

PASSENGER CARS										TRUCKS									
ALL			INDIANA			NON-INDIANA			ALL	<5000 LBS.			>5000 LBS.						
OBSERVATION	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT		LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	
NUMBER OF VEHICLES	485	435	351	377	134	58	216	210		108	119	108	119	108	91				
AVE. SPEED (MPH)	60.63	60.65	60.58	60.59	60.79	61.00	58.57	59.87		58.96	60.69	58.96	60.69	58.18	58.79				
STANDARD DEVIATION	4.964	4.992	5.073	5.142	4.679	3.889	4.213	4.701		4.445	4.586	4.445	4.586	3.950	4.656				
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.	0.	0.	0.				
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.	0.	0.	0.				
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.	0.	0.	0.				
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.	0.	0.	0.				
44 MPH	0.	0.	0.	0.	0.	0.	0.	0.5		0.	0.8	0.	0.8	0.	0.				
49 MPH	0.8	1.1	1.1	1.3	0.	0.	0.9	1.0		0.	0.8	1.9	0.8	1.9	1.1				
54 MPH	10.3	10.1	11.7	10.9	6.7	5.2	15.7	13.3		14.8	9.2	16.7	9.2	16.7	18.7				
59 MPH	42.9	42.8	43.3	43.5	41.8	37.9	62.5	42.9		58.3	35.3	66.7	35.3	66.7	52.7				
64 MPH	79.8	78.4	79.2	79.0	81.3	74.1	90.7	84.3		88.0	79.0	93.5	79.0	93.5	91.2				
69 MPH	96.1	95.6	96.0	95.0	96.3	100.0	99.1	98.1		99.1	97.5	99.1	97.5	99.1	98.9				
74 MPH	99.2	99.1	99.1	98.9	99.3	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0				
79 MPH	100.0	99.8	100.0	99.7	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0				
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0				
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0				
DIRECTION: SB																			
# OF VEHICLES	242	202	177	183	65	19	131	95		69	55	62	40						
AVERAGE SPEED	61.13	60.12	60.74	60.07	62.20	60.68	59.25	59.11		59.35	60.25	59.15	57.53						
DIRECTION: NB																			
# OF VEHICLES	243	233	174	194	69	39	85	115		39	64	46	51						
AVERAGE SPEED	60.14	61.10	60.41	61.09	59.46	61.15	57.52	60.50		58.28	61.06	50.87	59.78						



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WEATHER: BRIGHT-CLEAR

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 8/1/85

TIME: 4:24 PM

OBSERVATION	PASSENGER CARS						TRUCKS											
	ALL			INDIANA			NON-INDIANA			ALL			<5000 LBS.			>5000 LBS.		
	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT		
NUMBER OF VEHICLES	325	354	163	182	162	172	196	194	68	100	128	94						
AVE. SPEED (MPH)	59.74	60.78	59.34	60.52	60.14	61.05	57.72	59.15	57.79	59.13	57.69	59.18						
STANDARD DEVIATION	4.414	4.343	4.425	4.303	4.379	4.380	3.778	4.611	4.297	5.063	3.488	4.103						
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	44 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	49 MPH	0.9	0.3	1.2	0.5	0.6	1.5	1.5	2.9	2.0	0.8	1.1						
	54 MPH	9.5	4.5	11.0	4.4	8.0	4.7	18.4	11.3	20.6	14.0	17.2						
	59 MPH	53.2	41.2	57.1	44.0	49.4	38.4	72.4	56.2	66.2	56.0	75.8						
	64 MPH	84.0	81.4	87.1	83.0	80.9	79.7	95.9	84.5	95.6	81.0	96.1						
	69 MPH	99.4	96.3	99.4	96.7	99.4	95.9	99.5	97.9	98.5	97.0	100.0						
74 MPH	100.0	99.4	100.0	100.0	100.0	98.8	100.0	100.0	100.0	100.0	100.0							
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0							
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0							
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0							
DIRECTION: NB																		
# OF VEHICLES	166	186	96	95	70	91	94	110	36	61	58	49						
AVERAGE SPEED	59.94	60.12	59.53	59.59	60.50	60.68	57.95	58.95	57.72	58.90	58.09	59.00						
DIRECTION: SB																		
# OF VEHICLES	159	168	67	87	92	81	102	84	32	39	70	45						
AVERAGE SPEED	59.53	61.50	59.08	61.53	59.87	61.47	57.52	59.43	57.88	59.49	57.36	59.38						



TABLE A4:SPEED DATA

STATION: RI-12      HIGHWAY: I-74      LOCATION: EAST OF I-465 AT MILE MARKER 108.8      WEATHER: OVERCAST-BRIGHT

NO. OF LANES: 4      TYPE OF SURFACE: ASPHALT

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 6/5/86      DATE: 7/17/85

TIME: 11:40 AM      TIME: 12:10 PM

PASSENGER CARS										TRUCKS					
ALL			INDIANA			NON-INDIANA			ALL	<5000 LBS.			>5000 LBS.		
OBSERVATION	LAST	PRES- ENT	LAST	PRES- ENT	LAST	LAST	PRES- ENT	LAST		LAST	PRES- ENT	LAST	LAST	PRES- ENT	ENT
NUMBER OF VEHICLES	345	383	235	243	110	140	202	228	86	129	116	99			
AVE. SPEED (MPH)	59.41	60.28	59.34	59.93	59.56	60.90	57.71	59.71	57.49	60.74	57.87	58.36			
STANDARD DEVIATION	4.719	4.065	4.625	4.102	4.934	3.939	4.504	4.411	4.806	4.614	4.280	3.748			
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
44 MPH	0.3	0.3	0.4	0.	0.	0.7	0.	0.	0.	0.	0.	0.			
49 MPH	0.9	0.8	0.9	0.8	0.9	0.7	4.0	0.9	4.7	0.8	3.4	1.0			
54 MPH	14.2	6.3	13.6	7.4	15.5	4.3	22.8	9.2	22.1	5.4	23.3	14.1			
59 MPH	54.8	41.5	55.7	48.1	52.7	30.0	67.8	51.8	69.8	42.6	66.4	63.6			
64 MPH	84.9	87.7	85.1	89.3	84.5	85.0	92.6	88.2	90.7	83.7	94.0	93.9			
69 MPH	98.3	97.9	98.7	97.9	97.3	97.9	99.5	97.8	100.0	96.1	99.1	100.0			
74 MPH	99.4	99.7	99.6	99.6	99.1	100.0	100.0	99.1	100.0	98.4	100.0	100.0			
79 MPH	100.0	99.7	100.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
DIRECTION: EB															
# OF VEHICLES	177	181	109	107	68	74	93	122	39	64	54	58			
AVERAGE SPEED	59.62	60.52	59.61	59.99	59.63	61.30	57.09	60.10	57.28	61.14	56.94	58.95			
DIRECTION: WB															
# OF VEHICLES	168	202	126	136	42	66	109	106	47	65	62	41			
AVERAGE SPEED	59.19	60.07	59.11	59.88	59.43	60.45	58.24	59.25	57.66	60.34	58.68	57.54			





TABLE A5:SPEED DATA

STATION: RI-21      HIGHWAY: I-69      LOCATION: 1.6 MILES SOUTH OF SR 18, MILE MARKER 62

NO. OF LANES: 4      TYPE OF SURFACE: ASPHALT      WEATHER: OVERCAST

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 6/12/86

DATE: 9/3/85

TIME: 1:44 PM

TIME: 5:44 PM

PASSENGER CARS										TRUCKS			
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-		PRES-		PRES-		PRES-		PRES-		PRES-	
		ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST
NUMBER OF VEHICLES	321	347	233	259	88	88	208	207	71	127	137	80	
AVE. SPEED (MPH)	59.34	60.05	59.04	60.07	60.14	60.02	57.09	58.79	58.01	59.07	56.61	58.35	
STANDARD DEVIATION	4.496	4.102	4.569	3.968	4.219	4.498	4.253	3.659	5.378	3.656	3.458	3.643	
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
44 MPH	0.3	0.	0.4	0.	0.	0.	0.5	0.	1.4	0.	0.	0.	
49 MPH	1.6	1.2	2.1	1.2	0.	1.1	2.9	0.	5.6	0.	1.5	0.	
54 MPH	11.8	8.6	14.2	8.1	5.7	10.2	24.0	13.5	22.5	11.0	24.8	17.5	
59 MPH	52.3	43.5	53.6	43.2	48.9	44.3	72.1	54.6	59.2	51.2	78.8	60.0	
64 MPH	88.5	87.3	88.8	86.9	87.5	88.6	96.2	94.2	90.1	92.9	99.3	96.3	
69 MPH	98.1	99.4	98.7	100.0	96.6	97.7	99.0	99.5	97.2	99.2	100.0	100.0	
74 MPH	99.4	100.0	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

DIRECTION: NB

# OF VEHICLES	160	164	113	114	47	50	100	101	32	62	68	39	
AVERAGE SPEED	59.81	60.49	59.49	60.45	60.60	60.58	57.76	59.50	58.63	59.24	57.35	59.90	
DIRECTION: SB													
# OF VEHICLES	161	183	120	145	41	38	108	106	39	65	69	41	
AVERAGE SPEED	58.88	59.67	58.63	59.77	59.61	59.29	56.46	58.12	57.51	58.91	55.87	56.88	



TABLE A6:SPEED DATA

STATION: RI-34      HIGHWAY: I-65      LOCATION: 2 MILES SOUTH OF SR 39, MILE MARKER 135

NO. OF LANES: 4      TYPE OF SURFACE: ASPHALT      WEATHER: BRIGHT-SUNNY

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 5/22/86      DATE: 7/23/85

TIME: 11:06 AM      TIME: 2:29 PM

PASSENGER CARS										TRUCKS									
ALL					INDIANA					NON-INDIANA					ALL				
OBSERVATION	PRES-		PRES-		PRES-		PRES-		LAST	PRES-		PRES-		LAST	PRES-		PRES-		LAST
	LAST	ENT	ENT	LAST	ENT	LAST	ENT	LAST		ENT	LAST	ENT	LAST		ENT	LAST	ENT	LAST	
NUMBER OF VEHICLES	372	409		254	243		118	166	204	210	77	109	127	101					
AVE. SPEED (MPH)	59.62	61.00		59.28	60.77		60.36	61.34	58.37	59.61	58.65	60.45	58.20	58.71					
STANDARD DEVIATION	4.261	4.145		4.298	4.290		4.101	3.911	4.487	3.757	4.994	4.093	4.162	3.135					
24 MPH	0.	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.					
29 MPH	0.	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.					
34 MPH	0.	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.					
39 MPH	0.	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.					
44 MPH	0.	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.					
49 MPH	0.5	0.		0.8	0.		0.	0.	0.5	0.	0.	0.	0.8	0.					
54 MPH	10.8	4.6		11.4	4.9		9.3	4.2	19.6	4.8	24.7	3.7	16.5	5.9					
59 MPH	47.8	36.2		53.5	39.5		35.6	31.3	60.8	54.8	58.4	46.8	62.2	63.4					
64 MPH	89.2	83.4		90.6	84.0		86.4	82.5	92.2	88.1	90.9	83.5	92.9	93.1					
69 MPH	98.9	95.6		98.8	95.1		99.2	96.4	98.5	98.6	97.4	97.2	99.2	100.0					
74 MPH	100.0	99.8		100.0	100.0		100.0	99.4	99.5	100.0	98.7	100.0	100.0	100.0					
79 MPH	100.0	100.0		100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					
84 MPH	100.0	100.0		100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					
89 MPH	100.0	100.0		100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

DIRECTION: NB																			
# OF VEHICLES	195	191		126	103		69	88	100	98	44	50	56	48					
AVERAGE SPEED	59.47	60.97		58.94	60.50		60.44	61.51	58.94	59.24	58.82	59.82	59.04	58.65					
DIRECTION: SB																			
# OF VEHICLES	177	218		128	140		49	78	104	112	33	59	71	53					
AVERAGE SPEED	59.80	61.03		59.62	60.96		60.26	61.15	57.82	59.94	58.42	60.98	57.53	58.77					



ABLE A7:SPEED DATA

STATION: 4L-17 HIGHWAY: US 52 LOCATION: 2.0 MILES EAST OF US 231 WEATHER: OVERCAST

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT

THIS OBSERVATION LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 5/21/86 DATE: 7/22/85

TIME: 10:00 AM TIME: 2:10 PM

PASSENGER CARS										TRUCKS					
ALL			INDIANA			NON-INDIANA			ALL	<5000 LBS.		>5000 LBS.			
OBSERVATION	LAST	PRES- ENT	LAST	PRES- ENT	LAST	LAST	PRES- ENT	LAST		LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT
NUMBER OF VEHICLES	387	404	330	366	57	38	215	228	125	176	90	52			
AVE. SPEED (MPH)	55.70	58.25	55.65	58.24	55.98	58.39	52.87	56.62	54.62	56.91	50.43	55.65			
STANDARD DEVIATION	4.940	4.856	4.993	4.851	4.654	4.968	6.643	5.576	5.379	5.305	7.449	6.371			
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
34 MPH	0.3	0.	0.3	0.	0.	0.	0.5	0.	0.	0.	1.1	0.			
39 MPH	0.5	0.	0.6	0.	0.	0.	2.3	0.4	0.	0.	5.6	1.9			
44 MPH	2.3	0.2	2.7	0.3	0.	0.	17.2	2.6	4.8	1.1	34.4	7.7			
49 MPH	10.9	3.0	10.9	3.3	10.5	0.	25.6	11.0	13.6	8.5	42.2	19.2			
54 MPH	36.4	20.3	37.3	19.9	31.6	23.7	58.1	30.7	52.0	31.3	66.7	28.8			
59 MPH	79.1	61.4	78.8	61.5	80.7	60.5	86.0	73.2	84.8	72.2	87.8	76.9			
64 MPH	97.2	90.8	97.0	91.0	98.2	89.5	96.7	92.1	96.0	90.9	97.8	96.2			
69 MPH	100.0	98.8	100.0	98.6	100.0	100.0	99.5	99.6	99.2	99.4	100.0	100.0			
74 MPH	100.0	100.0	100.0	100.0	100.0	100.0	99.5	100.0	99.2	100.0	100.0	100.0			
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
DIRECTION: EB															
# OF VEHICLES	192	227	170	209	22	18	94	115	62	88	32	27			
AVERAGE SPEED	54.59	58.68	54.56	58.63	54.86	59.22	53.26	57.06	53.90	57.31	52.00	56.26			
DIRECTION: WB															
# OF VEHICLES	195	177	160	157	35	20	121	113	63	88	58	25			
AVERAGE SPEED	56.78	57.71	56.81	57.71	56.69	57.65	52.57	56.18	55.33	56.51	49.57	55.00			



TABLE A8:SPEED DATA

STATION: 4L-20

HIGHWAY: US 41

LOCATION: 1.0 MILE NORTH OF SR 2

NO. OF LANES: 4

TYPE OF SURFACE: ASPHALT

WEATHER: SUNNY

## THIS OBSERVATION

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 5/23/86

DATE: 8/14/85

TIME: 1:23 PM

TIME: 12:36 PM

PASSENGER CARS													TRUCKS					
ALL				INDIANA				NON-INDIANA				ALL		<5000 LBS.		>5000 LBS.		
OBSERVATION	LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES- ENT	
		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT						
NUMBER OF VEHICLES	277	319		194	205		83	114		225	230		120	121		105	109	
AVE. SPEED (MPH)	58.03	59.78		57.60	60.00		59.04	59.39		56.64	56.33		57.02	57.01		56.20	55.58	
STANDARD DEVIATION	4.611	5.350		4.388	5.719		4.977	4.611		5.055	4.778		5.240	4.716		4.823	4.756	
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	44 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.3	0.	0.	0.	0.	0.	2.8	
	49 MPH	2.5	0.9	3.1	1.0	1.2	0.9	7.1	7.4	7.5	5.0	6.7	10.1					
	54 MPH	21.3	16.0	22.2	16.6	19.3	14.9	33.8	34.8	29.2	31.4	39.0	38.5					
	59 MPH	65.7	49.2	69.1	48.3	57.8	50.9	70.7	77.0	66.7	73.6	75.2	80.7					
	64 MPH	90.6	82.8	93.3	80.0	84.3	87.7	94.2	95.2	92.5	93.4	96.2	97.2					
69 MPH	98.2	95.6	99.0	94.6	96.4	97.4	99.1	99.1	99.2	99.2	99.0	99.1						
74 MPH	99.6	98.7	100.0	98.0	98.8	100.0	100.0	99.6	100.0	99.2	100.0	100.0						
79 MPH	100.0	99.4	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						
DIRECTION: NB																		
# OF VEHICLES	150	164		104	116		46	48		97	115		60	62		37	53	
AVERAGE SPEED	57.66	59.40		57.44	59.74		58.15	58.58		55.24	55.04		55.93	56.32		54.11	53.55	
DIRECTION: SB																		
# OF VEHICLES	127	155		90	89		37	66		128	115		60	59		68	56	
AVERAGE SPEED	58.47	60.18		57.78	60.34		60.13	59.97		57.69	57.62		58.10	57.73		57.34	57.50	

## DIRECTION: NB

# OF VEHICLES

150 164 104 116 46 48 97 115 60 62 37 53

AVERAGE SPEED

57.66 59.40 57.44 59.74 58.15 58.58 55.24 55.04 55.93 56.32 54.11 53.55

## DIRECTION: SB

# OF VEHICLES

127 155 90 89 37 66 128 115 60 59 68 56

AVERAGE SPEED

58.47 60.18 57.78 60.34 60.13 59.97 57.69 57.62 58.10 57.73 57.34 57.50





TABLE A9:SPEED DATA

STATION: 4L-21      HIGHWAY: US 31      LOCATION: 0.8 MILE NORTH OF SR 38      WEATHER: CLEAR-BRIGHT

NO. OF LANES: 4      TYPE OF SURFACE: ASPHALT

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 8/13/86      DATE: 8/18/85

TIME: 10:32 AM      TIME: 2:14 PM

PASSENGER CARS												TRUCKS									
ALL						INDIANA			NON-INDIANA			ALL			<5000 LBS.			>5000 LBS.			
OBSERVATION		LAST		PRES- ENT		LAST		PRES- ENT		LAST		PRES- ENT		LAST		PRES- ENT		LAST		PRES- ENT	
NUMBER OF VEHICLES																					
AVE. SPEED (MPH)		57.52		58.59		57.32		58.46		58.36		59.25		56.18		56.76		57.03		55.16	
STANDARD DEVIATION		4.489		4.551		4.477		4.288		4.462		5.654		5.069		4.541		5.008		4.981	
24 MPH		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
29 MPH		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
34 MPH		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
39 MPH		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
44 MPH		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
49 MPH		4.6		2.6		4.9		2.8		3.4		1.5		9.5		5.9		5.1		14.8	
54 MPH		24.6		17.5		26.6		16.7		15.9		21.5		39.1		29.0		33.7		29.6	
59 MPH		68.1		59.4		69.5		60.3		62.5		55.4		74.3		72.0		68.4		74.4	
64 MPH		93.8		93.2		94.5		94.3		90.9		87.7		92.7		96.8		90.8		97.6	
69 MPH		99.3		98.7		99.2		99.7		100.0		93.8		99.4		100.0		99.0		100.0	
74 MPH		100.0		99.5		100.0		99.7		100.0		98.5		100.0		100.0		100.0		100.0	
79 MPH		100.0		99.5		100.0		99.7		100.0		98.5		100.0		100.0		100.0		100.0	
84 MPH		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0	
89 MPH		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0	
DIRECTION: NB																					
# OF VEHICLES		207		183		174		145		33		38		68		90		31		56	
AVERAGE SPEED		56.30		58.92		56.13		58.79		57.21		59.39		53.69		55.92		54.19		55.77	
DIRECTION: SB																					
# OF VEHICLES		245		199		190		172		55		27		111		96		67		44	
AVERAGE SPEED		58.55		58.29		58.40		58.17		59.06		59.04		57.71		57.55		58.34		57.20	



TABLE A10:SPEED DATA

STATION: 4L-32      HIGHWAY: US 30      LOCATION: 3.7 MILES WEST OF US 421      WEATHER: OVERCAST

NO. OF LANES: 4      TYPE OF SURFACE: ASPHALT

## THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 8/14/86

DATE: 9/4/85

TIME: 11:34 AM

TIME: 11:08 AM

PASSENGER CARS										TRUCKS					
ALL			INDIANA			NON-INDIANA			ALL	<5000 LBS.			>5000 LBS.		
OBSERVATION	LAST	PRES- ENT	LAST	PRES- ENT	LAST	ENT	LAST	PRES- ENT		LAST	PRES- ENT	LAST	ENT	LAST	PRES- ENT
NUMBER OF VEHICLES	276	315	208	210	68	105	269	200	96	103	173	97			
AVE. SPEED (MPH)	57.80	59.47	57.35	58.82	59.18	60.78	57.35	58.38	56.81	57.83	57.64	58.96			
STANDARD DEVIATION	4.437	4.074	4.491	3.985	3.992	3.952	4.678	4.709	5.629	5.174	4.043	4.108			
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
44 MPH	0.7	0.	1.0	0.	0.	0.	0.7	0.	2.1	0.	0.	0.			
49 MPH	2.2	0.3	2.9	0.5	0.	0.	4.1	2.5	9.4	4.9	1.2	0.			
54 MPH	21.4	9.5	26.4	11.0	5.9	6.7	27.1	19.5	31.3	27.2	24.9	11.3			
59 MPH	66.7	52.1	70.2	60.5	55.9	35.2	71.7	57.0	74.0	63.1	70.5	50.5			
64 MPH	94.6	88.6	95.7	91.0	91.2	83.8	93.7	91.5	92.7	90.3	94.2	92.8			
69 MPH	99.6	99.4	100.0	99.5	98.5	99.0	99.3	98.5	97.9	97.1	100.0	100.0			
74 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
DIRECTION: EB															
# OF VEHICLES	142	158	104	105	38	53	142	97	56	48	86	49			
AVERAGE SPEED	58.05	59.50	57.58	58.90	59.34	60.70	58.24	58.24	58.34	57.71	58.17	58.76			
DIRECTION: WB															
# OF VEHICLES	134	157	104	105	30	52	127	103	40	55	87	48			
AVERAGE SPEED	57.54	59.45	57.13	58.74	58.97	60.87	56.35	58.51	54.67	57.95	57.12	59.17			



TABLE All:SPEED DATA

STATION: 2L-18      HIGHWAY: US 35      LOCATION: 1.9 MILES EAST OF I-69      WEATHER: CLEAR-BRIGHT

NO. OF LANES: 2      TYPE OF SURFACE: ASPHALT

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 8/13/86      DATE: 7/30/85

TIME: 1:11 PM      TIME: 12:43 PM

PASSENGER CARS															TRUCKS														
ALL					INDIANA					NON-INDIANA					ALL					<5000 LBS.					>5000 LBS.				
OBSERVATION	PRES-		PRES-		PRES-		PRES-		LAST	PRES-		PRES-		LAST	PRES-		PRES-		LAST	PRES-		PRES-		LAST	PRES-		PRES-		LAST
	ENT	ENT	ENT	ENT	ENT	ENT	ENT	ENT		ENT	ENT	ENT	ENT		ENT	ENT	ENT	ENT		ENT	ENT	ENT	ENT		ENT	ENT	ENT	ENT	
NUMBER OF VEHICLES	361	341	324	306	37	35	202	203	113	117	89	86																	
AVE. SPEED (MPH)	53.55	57.53	53.62	57.56	52.92	57.34	52.13	55.90	53.76	56.60	50.06	54.94																	
STANDARD DEVIATION	5.377	5.409	5.380	5.424	5.382	5.352	5.382	5.067	4.819	4.725	5.371	5.380																	
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.																	
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.																	
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.																	
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.																	
44 MPH	3.9	0.6	4.0	0.7	2.7	0.	10.4	2.5	3.5	1.7	19.1	3.5																	
49 MPH	22.4	5.6	21.9	4.9	27.0	11.4	24.3	11.3	15.0	6.8	36.0	17.4																	
54 MPH	56.2	27.9	56.2	27.8	56.8	28.6	65.3	35.5	57.5	28.2	75.3	45.3																	
59 MPH	88.4	66.3	88.0	67.0	91.9	60.0	91.6	80.3	86.7	80.3	97.8	80.2																	
64 MPH	97.5	88.3	97.5	88.2	97.3	88.6	99.5	95.6	99.1	94.9	100.0	96.5																	
69 MPH	98.9	97.4	99.1	97.1	97.3	100.0	100.0	99.5	100.0	99.1	100.0	100.0																	
74 MPH	99.7	100.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0																	
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0																	
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0																	
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0																	
DIRECTION: EB																													
# OF VEHICLES	149	147	136	131	13	16	110	93	58	53	52	40																	
AVERAGE SPEED	54.52	57.31	54.71	57.21	52.46	58.06	53.15	56.08	54.43	56.85	51.73	55.05																	
DIRECTION: WB																													
# OF VEHICLES	212	194	188	175	24	19	92	110	55	64	37	46																	
AVERAGE SPEED	52.86	57.71	52.82	57.81	53.17	56.74	50.90	55.75	53.06	56.39	47.70	54.85																	



TABLE A12:SPEED DATA

STATION: 2L-54      HIGHWAY: US 231      LOCATION: 1.1 MILES SOUTH OF SR 234      WEATHER: SLIGHTLY OVERCAST

NO. OF LANES: 2      TYPE OF SURFACE: ASPHALT

THIS OBSERVATION      LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 6/23/86      DATE: 9/5/85

TIME: 10:45 AM      TIME: 3:11 PM

PASSENGER CARS													TRUCKS					
ALL				INDIANA				NON-INDIANA				ALL		<5000 LBS.		>5000 LBS.		
OBSERVATION	LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-	
		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT			
NUMBER OF VEHICLES	396	303	261	13	42	202	223	129	146	73	77							
AVE. SPEED (MPH)	58.16	56.87	58.13	56.76	59.00	57.55	57.07	56.14	57.32	56.08	56.26							
STANDARD DEVIATION	5.563	5.106	5.640	5.105	2.236	5.124	5.339	5.345	5.290	5.421	5.230							
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.							
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.							
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.							
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.							
	44 MPH	1.5	0.7	1.6	0.8	0.	2.0	1.8	1.6	2.1	2.7							
	49 MPH	4.0	6.3	4.2	6.5	0.	7.4	9.4	5.4	10.3	11.0							
	54 MPH	20.7	29.0	21.4	30.3	0.	21.4	24.8	35.9	21.7	34.9							
	59 MPH	64.4	73.3	64.5	73.2	61.5	73.8	68.3	75.3	65.9	77.4							
	64 MPH	89.1	93.7	88.8	93.9	100.0	92.9	93.1	92.8	92.2	92.5							
69 MPH	97.2	98.3	97.1	98.9	100.0	95.2	98.0	99.6	97.7	99.3								
74 MPH	98.7	99.7	98.7	99.6	100.0	100.0	100.0	100.0	100.0	100.0								
79 MPH	99.5	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0								
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0								
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0								
DIRECTION: NB																		
# OF VEHICLES	171	158	167	140	4	18	84	106	49	74	35							
AVERAGE SPEED	58.68	56.95	58.64	56.76	60.50	58.44	58.14	55.62	58.00	55.42	58.34							
DIRECTION: SB																		
# OF VTHICLES	225	145	216	121	9	24	118	117	80	72	38							
AVERAGE SPEED	57.76	56.79	57.73	56.77	58.33	56.88	56.31	56.62	56.90	56.76	55.05							





WEATHER: HAZY

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: 8/16/85

TIME: 10:03 AM

OBSERVATION	PASSENGER CARS												TRUCKS									
	ALL						INDIANA			NON-INDIANA			ALL			<5000 LBS.			>5000 LBS.			
	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT	LAST	PRES- ENT		
NUMBER OF VEHICLES	436	331	399	311	37	20	191	178	114	111	77	67										
AVE. SPEED (MPH)	54.10	56.17	54.06	56.14	54.43	56.70	53.73	54.63	54.50	55.37	52.58	53.40										
STANDARD DEVIATION	4.820	4.103	4.652	4.088	6.427	4.402	4.259	4.916	4.163	5.259	4.165	4.034										
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.										
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.										
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.										
39 MPH	0.9	0.	1.0	0.	0.	0.	0.5	0.	0.	0.	1.3	0.										
44 MPH	3.2	0.3	2.3	0.3	13.5	0.	2.1	2.8	0.9	2.7	3.9	3.0										
49 MPH	13.8	3.0	13.8	2.9	13.5	5.0	14.7	12.4	9.6	10.8	22.1	14.9										
54 MPH	51.6	33.2	51.9	33.4	48.6	30.0	57.1	48.9	48.2	41.4	70.1	61.2										
59 MPH	89.0	82.5	89.7	83.0	81.1	75.0	95.8	88.2	93.9	85.6	98.7	92.5										
64 MPH	97.9	96.7	98.2	96.8	94.6	95.0	99.0	97.8	98.2	96.4	100.0	100.0										
69 MPH	99.8	99.4	99.7	99.4	100.0	100.0	99.5	98.3	99.1	97.3	100.0	100.0										
74 MPH	100.0	100.0	100.0	100.0	100.0	100.0	99.5	100.0	99.1	100.0	100.0	100.0										
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0										
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0										
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0										
DIRECTION: NB																						
# OF VEHICLES	182	154	151	143	31	11	93	90	56	58	37	32										
AVERAGE SPEED	53.94	56.57	53.73	56.52	55.00	57.18	53.67	55.21	54.71	55.57	52.08	54.56										
DIRECTION: SB																						
# OF VEHICLES	254	177	248	168	6	9	98	88	58	53	40	35										
AVERAGE SPEED	54.21	55.82	54.27	55.80	51.50	56.11	53.79	54.03	54.29	55.15	53.05	52.34										



TABLE A14:SPEED DATA

STATION: 2L-91 HIGHWAY: SR 43 LOCATION: 2.0 MILES SOUTH OF CHALMERS  
 NO. OF LANES: 2 TYPE OF SURFACE: ASPHALT WEATHER: SUNNY-CLEAR

THIS OBSERVATION LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)  
 DATE: 7/31/86 DATE: 7/22/85  
 TIME: 11:36 AM TIME: 10:35 AM

PASSENGER CARS										TRUCKS					
OBSERVATION		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.		>5000 LBS.	
		PRES- LAST	PRES- ENT	PRES- LAST	PRES- ENT	PRES- LAST	PRES- ENT	PRES- LAST	PRES- ENT	PRES- LAST	PRES- ENT	PRES- LAST	PRES- ENT	PRES- LAST	PRES- ENT
NUMBER OF VEHICLES		345	316	305	283	40	33	178	196	94	129	84	67		
AVE. SPEED (MPH)		57.31	58.34	57.23	58.05	57.88	60.88	56.34	57.84	56.04	57.88	56.68	57.78		
STANDARD DEVIATION		5.348	4.360	5.404	4.117	4.926	5.516	4.588	4.808	4.250	4.849	4.943	4.764		
24 MPH		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
29 MPH		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
34 MPH		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
39 MPH		0.6	0.	0.7	0.	0.	0.	0.	0.	0.	0.	0.	0.		
44 MPH		2.0	0.	2.0	0.	2.5	0.	0.6	0.	1.1	0.	0.	0.		
49 MPH		7.0	2.5	7.2	2.8	5.0	0.	9.0	4.1	6.4	3.1	11.9	6.0		
54 MPH		24.6	16.1	26.2	17.3	12.5	6.1	30.3	21.4	30.9	19.4	29.8	25.4		
59 MPH		67.8	63.3	67.2	65.7	72.5	42.4	75.8	65.8	81.9	68.2	69.0	61.2		
64 MPH		92.5	93.0	92.1	94.0	95.0	84.8	96.6	92.9	98.9	91.5	94.0	95.5		
69 MPH		98.6	98.7	98.7	99.6	97.5	90.9	99.4	98.0	98.9	97.7	100.0	98.5		
74 MPH		99.7	99.4	100.0	100.0	97.5	93.9	100.0	100.0	100.0	100.0	100.0	100.0		
79 MPH		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
84 MPH		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
89 MPH		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

DIRECTION: NB

# OF VEHICLES 198 176 171 153 27 23 85 96 65 45 40 31  
 AVERAGE SPEED 56.61 58.41 56.47 57.89 57.48 61.87 55.65 57.64 58.09 55.72 56.68

DIRECTION: SB

# OF VEHICLES 147 140 134 130 13 10 93 100 64 49 44 36  
 AVERAGE SPEED 58.24 58.26 58.20 58.24 58.69 58.60 56.98 58.04 57.66 57.54 58.72



HIGHWAY: URBAN INTERSTATE

DATE: JULY TO SEPTEMBER 1985

[illegible]



ABLE A16:SPEED DATA

STATION: RI-ALL HIGHWAY: RURAL INTERSTATE

THIS OBSERVATION

DATE: MAY TO AUGUST 1986

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: JULY TO SEPTEMBER 1985

PASSENGER CARS										TRUCKS					
ALL										ALL					
INDIANA										NON-INDIANA					
PRES- ENT										PRES- ENT					
LAST										LAST					
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TABLE A17:SPEED DATA

STATION: 4L-ALL HIGHWAY: 4-LANE

## THIS OBSERVATION

DATE: MAY TO AUGUST 1986

## LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: JULY TO SEPTEMBER 1985

OBSERVATION	PASSENGER CARS						TRUCKS											
	ALL			INDIANA			NON-INDIANA			ALL			<5000 LBS.			>5000 LBS.		
	LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-	
		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT		ENT	
NUMBER OF VEHICLES	1392	1420	1096	1098	296	322	888	844	439	525	449	319						
AVE. SPEED (MPH)	57.17	58.96	56.87	58.74	58.28	59.70	55.85	56.99	56.29	57.03	55.41	56.92						
STANDARD DEVIATION	4.721	4.768	4.690	4.758	4.675	4.735	5.646	4.996	5.404	4.975	5.847	5.038						
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
	34 MPH	0.1	0.	0.1	0.	0.	0.1	0.	0.	0.	0.2	0.						
	39 MPH	0.1	0.	0.2	0.	0.	0.6	0.1	0.	0.	1.1	0.3						
	44 MPH	0.8	0.1	1.0	0.1	0.	4.5	1.2	1.8	0.4	7.1	2.5						
	49 MPH	5.5	1.8	6.0	2.2	3.4	11.1	6.9	9.1	6.3	13.1	7.8						
	54 MPH	26.6	16.2	29.0	16.7	17.6	38.7	28.8	37.1	30.1	40.3	26.6						
	59 MPH	70.4	56.1	72.4	58.5	63.2	75.5	70.1	73.8	71.2	77.1	68.3						
	64 MPH	94.3	89.2	95.3	89.9	90.5	94.4	93.8	93.2	93.0	95.5	95.3						
69 MPH	99.4	98.2	99.5	98.4	98.6	97.5	99.3	99.3	98.9	99.0	99.7							
74 MPH	99.9	99.6	100.0	99.5	99.7	99.7	99.9	99.9	99.8	100.0	100.0							
79 MPH	100.0	99.7	100.0	99.7	100.0	99.7	100.0	100.0	100.0	100.0	100.0							
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0							
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						



TABLE A18:SPEED DATA

STATION: 2L-ALL HIGHWAY: 2-LANE

THIS OBSERVATION LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)  
 DATE: JUNE TO AUGUST 1986 DATE: JULY TO SEPTEMBER 1985

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-		PRES-		PRES-		PRES-		PRES-		PRES-	
		ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST
NUMBER OF VEHICLES	1538	1291	1411	1161	127	130	773	800	450	503	323	297	
AVE. SPEED (MPH)	55.73	57.23	55.75	57.12	55.54	58.21	54.78	56.16	55.44	56.50	53.87	55.58	
STANDARD DEVIATION	5.626	4.839	5.614	4.766	5.780	5.368	5.320	5.163	4.888	5.150	5.751	5.141	
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO													
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
39 MPH	0.4	0.	0.4	0.	0.	0.	0.1	0.	0.	0.	0.3	0.	
44 MPH	2.7	0.4	2.4	0.4	5.5	0.	3.9	1.8	1.8	1.6	6.8	2.0	
49 MPH	11.8	4.3	11.6	4.2	13.4	5.4	14.0	9.3	9.1	7.8	20.7	11.8	
54 MPH	38.7	26.6	39.1	27.3	34.6	20.8	44.6	35.1	39.3	30.8	52.0	42.4	
59 MPH	77.8	71.3	77.6	72.4	79.5	62.3	82.9	77.1	81.6	77.5	84.8	76.4	
64 MPH	94.3	92.9	94.2	93.2	96.1	90.0	97.0	94.6	96.9	93.6	97.2	96.3	
69 MPH	98.6	98.5	98.7	98.7	98.4	96.2	99.2	98.9	98.9	98.4	99.7	99.7	
74 MPH	99.5	99.8	99.6	99.9	99.2	98.5	99.9	100.0	99.8	100.0	100.0	100.0	
79 MPH	99.9	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	



TABLE A19:SPEED DATA

STATION: ALL-14

HIGHWAY: URBAN INTERSTATE  
RURAL INTERSTATE  
4-LANE  
2-LANE

THIS OBSERVATION

DATE: MAY TO AUGUST 1986

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: JULY TO SEPTEMBER 1985

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-		PRES-		PRES-		PRES-		PRES-		PRES-	
		ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST	ENT	LAST
NUMBER OF VEHICLES	5081	4959	3875	3732	1206	1227	3010	2969	1374	1753	1636	1216	
AVE. SPEED (MPH)	57.72	59.17	57.33	58.82	58.97	60.22	56.41	57.75	56.66	58.03	56.19	57.35	
STANDARD DEVIATION	5.211	4.783	5.274	4.817	4.797	4.518	5.109	4.917	5.087	5.082	5.119	4.640	
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO													
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1	0.	
39 MPH	0.2	0.	0.2	0.	0.	0.	0.2	0.0	0.	0.	0.4	0.1	
44 MPH	1.1	0.1	1.2	0.2	0.6	0.1	2.4	0.8	1.2	0.6	3.4	1.2	
49 MPH	5.6	2.0	6.5	2.3	2.7	0.9	7.9	4.9	6.7	4.6	8.9	5.3	
54 MPH	24.1	15.0	27.2	16.7	14.1	9.8	32.0	22.8	31.8	22.0	32.2	23.8	
59 MPH	65.0	53.7	67.8	57.4	56.1	42.5	74.5	65.1	72.9	63.3	75.9	67.7	
64 MPH	91.1	88.0	91.9	88.9	88.4	85.0	95.0	92.0	94.0	90.0	96.0	94.8	
69 MPH	98.7	97.8	98.8	98.0	98.4	97.3	99.3	98.8	98.8	98.2	99.7	99.7	
74 MPH	99.7	99.7	99.7	99.7	99.7	99.5	99.9	99.9	99.8	99.8	100.0	100.0	
79 MPH	100.0	99.9	99.9	99.9	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	



TABLE A20:SPEED DATA

STATION: RURAL

HIGHWAY: RURAL INTERSTATE  
4-LANE  
2-LANE

THIS OBSERVATION

DATE: MAY TO AUGUST 1986

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 119)

DATE: JULY TO SEPTEMBER 1985

OBSERVATION	PASSENGER CARS										TRUCKS							
	ALL			INDIANA			NON-INDIANA			ALL			<5000 LBS.			>5000 LBS.		
	LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-		LAST	PRES-	
		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT		ENT	ENT		ENT	
NUMBER OF VEHICLES	4293	4204	3392	3186	901	1018	2471	2483	1191	1493	1280	990						
AVE. SPEED (MPH)	57.40	58.99	57.02	58.60	58.84	60.20	56.13	57.51	56.40	57.74	55.88	57.18						
STANDARD DEVIATION	5.230	4.782	5.234	4.771	4.960	4.614	5.266	4.964	5.175	5.076	5.340	4.771						
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.						
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1	0.						
39 MPH	0.2	0.	0.2	0.	0.	0.	0.2	0.0	0.	0.	0.5	0.1						
44 MPH	1.3	0.2	1.4	0.2	0.8	0.1	2.9	1.0	1.4	0.7	4.2	1.4						
49 MPH	6.3	2.1	7.1	2.5	3.2	1.1	9.1	5.5	7.6	5.0	10.5	6.3						
54 MPH	26.2	15.8	28.9	17.5	15.8	10.2	34.8	24.4	34.3	23.6	35.4	25.6						
59 MPH	67.2	55.2	70.0	59.2	56.7	42.6	75.4	67.0	74.1	66.4	76.6	68.0						
64 MPH	91.9	88.8	92.9	90.0	88.0	85.2	95.1	92.4	94.2	90.9	96.0	94.6						
69 MPH	98.9	97.9	99.0	98.2	98.4	97.0	99.2	98.9	98.7	98.3	99.7	99.7						
74 MPH	99.7	99.7	99.7	99.8	99.7	99.4	99.9	99.9	99.7	99.8	100.0	100.0						
79 MPH	100.0	99.9	99.9	99.9	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0						
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						







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